

IN THE CLAIMS

Please cancel claims 1-86, all of the claims in the subject U.S. patent application, as filed, as constituted by the verified translation of PCT/EP2005/050359. Please also cancel claims 1-86 filed under Article 19 by KBA on July 11, 2005. Please add new claims 87-169, as follows.

Claims 1-86 (Cancelled)

87. (New) A device for adjusting a contact pressure exerted by a roller on an adjacent rotational body comprising:

at least a first roller having first and second roller ends and a roller weight;

an adjacent rotational body engageable by said at least first roller along at least a first roller strip;

a support bearing for each of said first and second ends of said at least first roller;

a roller mount in each said support bearing, each said roller mount being shiftable radially in said associated support bearing;

at least one actuator interposed between each said support bearing and said associated roller mount, each said actuator being adapted to exert radial forces on said roller mount to impart a contact pressure exerted by said at least one roller in said at least first roller strip;

a control unit adapted to control said at least one actuator in each said support bearing independently of additional ones of said actuators in others of said support bearings to impart a contact pressure having a value exerted by said at least

first roller on said adjacent rotational body, said contact pressure including said radial force exerted by said at least actuator and at least a portion of a roller weight force on said first roller strip;

a designator usable to identify said at least first roller strip; and

a control element in said control unit, said control element being adapted to change said control pressure in said at least first roller strip selected using said designator.

88. (New) The device of claim 87 further including a pressure medium usable to pressurize each said actuator .

89. (New) The device of claim 87 further including a controllable device allocated to each said support bearing, said control unit using said controllable device to activate said at least one actuator for each said support bearing.

90. (New) The device of claim 89 wherein said controllable device applies pressure to said at least first actuator and to further actuators in each said support bearing synchronously at a first pressure level in a first operational position and at a second pressure level in a second operational position.

91. (New) The device of claim 90 wherein in said first and second operational positions, said first and second pressure levels are different from zero for at least one of said actuator in said support bearing.

92. (New) The device of claim 90 wherein said first pressure level and said second pressure level in different ones of said actuator in said support bearing are different from each other.

93. (New) The device of claim 90 wherein said first and second pressure levels are different.

94. (New) The device of claim 89 further including additional rollers each supported in an additional one of said support bearings and each having an additional actuator, at least two of said support bearings each having a unique identifying element, said controllable device for each said support bearing being selectable by use of said unique identifying element for each said support bearing.

95. (New) The device of claim 87 wherein one of said first and second ends of said at least first roller imparts a contact pressure different from a contact pressure imparted by the other of said first and second ends.

96. (New) The device of claim 87 wherein each said actuator in each said support bearing exerts a radial force directed towards said support bearing.

97. (New) The device of claim 96 wherein said contact pressure imparted by each said roller on said adjacent rotational body is a vector sum of said portion of said roller weight and said radial forces exerted by said actuators.

98. (New) The device of claim 87 wherein said at least one roller and said adjacent rotational body are arranged as a printing couple of a printing machine.
99. (New) The device of claim 98 wherein said printing couple includes multiple ones of said roller and said rotational body.
100. (New) The device of claim 98 wherein said control unit is allocated to said printing machine.
101. (New) The device of claim 87 wherein said rotational body is a forme cylinder.
102. (New) The device of claim 100 further including at least one channel having an opening in said forme cylinder.
103. (New) The device of claim 102 wherein said control unit adjusts said value of said contact pressure when said at least one channel opening and said roller strip are out of alignment with each other.
104. (New) The device of claim 87 wherein said rotational body is a supplementary roller.
105. (New) The device of claim 87 wherein said control unit delivers said radial forces to be exerted by said at least one actuator to provide said contact pressure having a

specific value.

106. (New) The device of claim 87 further including controllable values usable by said control unit to adjust said radial forces to be exerted by said actuator.

107. (New) The device of claim 87 further including an identifying element assigned to each said actuator in each said support bearing.

108. (New) The device of claim 87 wherein said control unit determines said contact pressure including a distance of a center point of said roller from a center point of said adjacent rotational body, and said portion of said roller weight determining by multiplication of a gravitational constant by a mass of said at least one roller.

109. (New) The device of claim 87 further including a display device on said control unit, said display device being adapted to display at least one value of said contact pressure.

110. (New) The device of claim 109 wherein said at least one value for said contact pressure can be changed.

111. (New) The device of claim 110 further including wherein said control unit is adapted to determine said radial forces exerted by said actuators in response to a change in said displayed value.

112. (New) The device of claim 110 further including controllable valves operable by said control unit and usable to vary said contact pressure through said control element.

113. (New) The device of claim 112 wherein said control unit adjusts said value of said contact pressure changed on said display device by control of said controllable valves.

114. (New) The device of claim 113 wherein said roller and said adjacent rotational body define a printing couple and when a rotational speed of said roller is at least 3000 rph.

115. (New) The device of claim 109 wherein said display unit is adapted to display on said display device a value of said contact pressure, said value being derived from said radial forces exerted by said actuator and from said portion of said roller weight.

116. (New) The device of claim 87 wherein each said support bearing includes a controllable fixation device, said fixation device, in a first position blocking said radial shifting of said roller mount, and in a second position allowing said radial shifting of said roller mount.

117. (New) The device of claim 116 further including fixation devices at said first and second support bearings for said first and second ends of said roller and being operable at the same time.

118. (New) The device of claim 116 further including a controllable valve usable to change said fixation device between said first position and said second position.

119. (New) The device of claim 87 further including several of said adjacent rotational bodies engageable by said at least first roller concurrently.

120. (New) The device of claim 87 further including a second roller engageable with said first roller.

121. (New) The device of claim 87 wherein said at least one roller and said adjacent rotational body are components of one of an inking unit and a dampening unit of a printing couple of a printing machine.

122. (New) The device of claim 98 wherein said printing machine is a newspaper printing press.

123. (New) The device of claim 101 further including a plurality of printing formes arranged in an axial direction on said forme cylinder.

124. (New) The device of claim 123 further including at least four of said printing formes covering said forme cylinder in said axial direction of said forme cylinder.

125. (New) The device of claim 87 further including a plurality of said actuators in

each said support bearing.

126. (New) The device of claim 125 wherein said actuators are non-rotatable with respect to said support bearing.

127. (New) The device of claim 125 wherein said plurality of actuators are distributed in a circular pattern around an axis of rotation of said roller.

128. (New) The device of claim 127 wherein said circularly arranged ones of said actuators in each said support bearing are assigned an identifying element in a fixed sequence.

129. (New) The device of claim 128 further including other support bearings having said plurality of actuators arranged in said circular pattern and assigned said identifying element.

130. (New) The device of claim 107 further including a plurality of support bearings each having said identifying element and further including pressure medium conduits connected in parallel to said actuators each having a same one of said identifying element.

131. (New) The device of claim 107 further including plural actuators in said support bearing and having different ones of said identifying elements and being connected by

separate pressure medium conduits to separate pressure levels.

132. (New) The device of claim 87 wherein said support bearings for said first and second ends of said roller each include a same number of said actuators.

133. (New) The device of claim 132 further including a plurality of said rollers each having said support bearings at said first and second ends.

134. (New) The device of claim 133 wherein all of said rollers each have said same number of said actuators.

135. (New) The device of claim 88 wherein said pressure medium is compressed air.

136. (New) The device of claim 87 wherein said actuator is a tubular component.

137. (New) The device of claim 136 wherein said tubular component is at least partially an elastomeric material.

138. (New) The device of claim 87 wherein said actuators are operable remotely by said control unit.

139. (New) The device of claim 125 wherein said plurality of actuators in each said support bearing form an opening angle with respect to each other.

140. (New) The device of claim 139 wherein said opening angle is different from 0° and 180°.

141. (New) The device of claim 139 wherein said opening angle is between 45° and 135°.

142. (New) The device of claim 87 wherein actuators in said support bearing at said first end of said roller exert a first contact pressure in said roller strip and further wherein said actuators in each support bearing at said second end of said roller exert a second contact pressure different from said first contact pressure.

143. (New) The device of claim 142 further wherein said adjacent rotational cylinder is a forme cylinder having a plurality of printing formes in an axial direction of said forme cylinder, said plurality of printing formes not completely covering said forme cylinder in said axial direction.

144. (New) The device of claim 107 wherein each said support bearing having an actuator is assigned a support bearing identifying element.

145. (New) The device of claim 144 wherein said actuator identifying element and said support bearing identifying element form an identification code.

146. (New) The device of claim 145 wherein said identification code is machine

readable.

147. (New) The device of claim 87 wherein said control unit is a mobile component.

148. (New) The device of claim 87 wherein said control unit is connected to said actuator only when a value of said contact force is to be changed.

149. (New) The device of claim 87 further including controllable valves between said control unit and said actuator, said control unit being connected to one of said valves only when said valve is to be controlled.

150. (New) The device of claim 149 wherein said valves are one of electrically and electromagnetically actuated.

151. (New) The device of claim 116 further including using said control unit to place said controllable fixation device in said second operational position, using said control device to change said value of said contact pressure while said controllable device is in said second operational position and then using said control unit to place said controllable fixation device in said first operational position.

152. (New) The device of claim 87 further including a memory device in said control unit.

153. (New) The device of claim 152 further including at least one set of values stored in said memory device, said at least one set of values defining a standard configuration for each value corresponding to said contact pressure to be exerted by each said roller.

154. (New) The device of claim 153 wherein said values of said standard configuration generate flattening on one of a surface of said roller and of said adjacent rotational component, said flattening being usable to achieve a level of print quality in a printed product.

155. (New) The device of claim 87 further including means for adjusting said rollers for said standard configuration using said control unit.

156. (New) The device of claim 87 wherein at least one of said roller and said adjacent rotational body has an elastically deformable circumferential surface.

157. (New) The device of claim 87 further including providing groups of simultaneously adjustable values in said control unit.

158. (New) The device of claim 157 further including at least one of an inking unit and a dampening unit including said at least first roller, said groups of simultaneously adjustable values being usable with said inking unit and said dampening unit.

159. (New) The device of claim 157 wherein said adjacent rotational body is a forme

cylinder and said groups of simultaneously adjustable rollers are usable with forme rollers operable with said forme cylinder.

160. (New) The device of claim 89 further including a plurality of said support bearings, each supporting one of a plurality of said rollers, each said support bearing having an identifying element, said controllable device for each said support being allocated to each said support being using said support bearing identifying element.

161. (New) The device of claim 87 wherein said control unit controls each said actuator independently.

162. (New) The device of claim 87 wherein said adjacent rotational body is a forme cylinder and further including at least a second roller, said first and second rollers each being engageable with said forme cylinder, each said roller having at least one said actuator which is controllable independently of actuators for other ones of said roller.

163. (New) The device of claim 162 further including at least three rollers engageable with said forme cylinder and each having at least one independently controlled actuator.

164. (New) The device of claim 87 wherein said control unit adjusts said contact pressure in a time period of less than one minute.

165. (New) The device of claim 87 wherein each said actuator exerts a contact

pressure using one of hydraulic, electric, motor-driven and piezoelectric action.

166. (New) A device for adjusting a contact pressure exerted by a roller on an adjacent rotational body comprising:

- at least a first roller having first and second roller ends and a roller weight;
- an adjacent rotational body engageable by said at least first roller along at least a first roller strip;

- a support bearing for each of said first and second ends of said at least first roller;

- a roller mount in each said support bearing, each said roller mount being shiftable radially in said associated support bearing;

- a plurality of actuators interposed between each said support bearing and said associated roller mount, each said actuator being adapted to exert radial forces on said roller mount to impart a contact pressure exerted by said at least one roller in said at least first roller strip; and

- a control unit adapted to control said plurality of actuators in each said support bearing independently of additional ones of said actuators in said support bearing, wherein contact pressures of different values are applied to said first and second units of said at least one roller, said actuators being activatable remotely by said control unit.

167. (New) A device for adjusting a contact pressure exerted by a roller on an adjacent rotational body comprising:

at least a first roller having first and second roller ends and a roller weight;
an adjacent rotational body engageable by said at least first roller along at least a first roller strip and being a forme cylinder;

a support bearing for each of said first and second ends of said at least first roller;

a roller mount in each said support bearing, each said roller mount being shiftable radially in said associated support bearing;

at least one actuator interposed between each said support bearing and said associated roller mount, each said actuator being adapted to exert radial forces on said roller mount to impart a contact pressure exerted by said at least one roller in said at least first roller strip; and

a control unit adapted to control said at least one actuator in each said support bearing independently of additional ones of said actuators in others of said support bearings to impart a contact pressure having a first value exerted on said forme cylinder by said first end of said at least one roller and having a second value different from said first value, exerted on said forme cylinder by said second end of said roller when said forme cylinder is provided with printing formes unevenly in an axial direction of said forme cylinder.

168. (New) The device of claim 166 wherein said control unit is usable to determine a value of said contact pressure exerted by at least one of said rollers using said radial forces exerted by said actuators in each said support bearings and at least a portion of a force of weight exerted by each said roller.

169. (New) The device of claim 166 wherein each said roller has a separate roller strip, and wherein each said separate roller strip has a designator, said control unit being usable to select said contact pressure of each said separate roller strip using said designator for each said separate roller strip.